



Benefits and Barriers To Fitness For Children With Disabilities

by Joanne Bauman

Most children have the option to participate in recreation, after-school activities, weekend team sports, and summer camps. At school, they have a chance to exercise in physical education classes and on the playground at recess. However, these opportunities for fitness and leisure are limited for children and adolescents with disabilities. Children with disabilities want to have friends, enjoy activities, have a break from parents, and be included like everyone else. Like other children, their interests range from swimming and sports, to visiting parks and playgrounds, attending summer camps, and just hanging out with friends.

Multiple barriers can stand in the way of fitness and leisure for children with disabilities. Many parents are apprehensive to encourage their children to become involved, because of the range of obstacles they were likely to encounter. Yet, many resources are making it possible for children with disabilities to participate in leisure options, and as this demand increases, more programs are likely to develop and grow.

Public Attitudes

At pools, playgrounds, gyms, and other facilities, parents and children say that they feel uncomfortable when they experience stares and comments. Parents voice frustration that many people do not seem accustomed to seeing children with varying disabilities in public. It can be difficult to endure when insensitive people ask, "What's wrong with him?" or "Will she pee in the pool?" Some parents of children with disabilities such as brain injuries and autism note that people sometimes cannot accept behaviors and reactions that might result from a child being overstimulated or having difficulty adjusting to the loud noises and acoustics of a gym or pool.

One way to dispel attitudinal barriers is to include images of children and youth with various disabilities in publicity for parks, gyms, camps, and community recreation programs. Materials can show children with disabilities in shorts and swimsuits engaged in various sports and activities. Adapted youth sport exhibitions in the community can showcase activities such as wheelchair basketball. Persons with disabilities can speak to schools and organizations about fitness and recreation. The Kids on the Block provides educational puppet programs that enlighten children on the issues of disability awareness and encourage non-disabled children to interact with children who have disabilities. Research shows that children who are educated together, instead of in segregated settings, are more likely to learn tolerance

and acceptance. It makes sense that inclusive recreation would offer the same benefits.

Lack of Recreation

In most team sports and organized activities, adults coach with the emphasis on being aggressive and competitive, as in professional sports. The goal is to win, and not to get together, have fun, and benefit from exercise. With an over-emphasis on performance and winning, children with disabilities may find few opportunities to be included in school, after-school, and weekend team sports.

Across the nation, adapted physical education is moving children with disabilities off the sidelines, in physical education classes. Adapted physical education is an individualized program of physical and motor fitness; fundamental motor skills and patterns; and skills in aquatics, dance and individual and group games and sports designed to meet the unique needs of individuals (Winnick, 2000). It is generally designed to meet long-term (greater than 30 days), unique needs of students with disabilities (Winnick, 2000). Classes are provided by a regular physical education teacher or by a full-time adapted physical education teacher. Adapted physical education provides students with the opportunity to participate in a regular physical education program.

In addition, after-school sports programs for physically disabled or visually impaired youth are developing through the efforts of organizations including Project ASPIRE (Adapted Sports Programs In Recreation and Education). Through Project ASPIRE, the American Association of Adapted Sports™ Programs (AAASP) joins forces with leading authorities in sport and physical fitness to lay the foundation for a network of school-based adapted athletic programs across the United States.

Many cities are offering adaptive recreation classes and sports such as basketball, baseball, softball, bowling, and tennis. Local parks and recreation departments have more information on city adaptive recreation options. Students with disabilities also need to participate equally in other after-school activities, such as 4-H, Scouting, the arts, and other enriching experiences.

Physical Access

It's one thing to have a community park, playground, pool, or gym, but the important issue is whether the child can actually use the structure. What's fun for a kid using a walker to go to a playground surfaced in wood chips only to watch other children swing, use the slides, and play in the sandbox? Access begins with sufficient parking, accommodations for vans with lifts, doors that open easily, elevators or ramps inside buildings, accessible bathrooms, changing stations or universal access rooms, barrier-free entry to pools, and adaptive equipment. In addition to play equipment that can accommodate wheelchairs, parks and playgrounds need lower drinking fountains, restrooms or availability of accessible port-a-potties, picnic tables that can accommodate wheelchairs, and barrier-free surfacing (i.e., not wood chips). Arenas, stadiums, and ball diamonds need line-of-sight seating, seating with additional room, and accessible concession counters.

Boundless Playgrounds and Hadley's Park are examples of the numerous growing prospects in recreation for children with disabilities. The mission of Boundless Playgrounds and Hadley's Park is to improve the lives of children by helping communities create exciting universally accessible playgrounds that allow children of all abilities to have fun and safe play environments so they can interact with each other and play to their highest potential. Accessible playgrounds can include wheelchair-accessible platform swings, lowered monkey bars, elevated sand boxes and water play tables, talk tubes, turning wheels, play walls with all sorts of push buttons and cranks, wide slides and ramps, all to accommodate children who use wheelchairs, walkers, or leg braces. Resources on accessible playgrounds are included below.

A variety of adapted sports programs across the nation offer skiing, horseback riding, scuba diving, tennis, softball, rafting, hiking, fishing, canoeing, sailing and organized trips for people of almost all ages with all types of disabilities. Information at the end of this article can help you find adapted programs in your area.

In addition, there are many opportunities for summer camps that offer all people with disabilities an opportunity to enjoy the great outdoors. Camps range from overnight to day camps, residential camps, and respite camps and offer various opportunities from sport activities to arts and crafts. For example, Easter Seals offers nationwide camping and recreational programs for children and adults with various disabilities at more than 140 facilities across the United States. For more camp listings, see the KidsCamp and NCPAD camp programs Web sites below.

National parks and state parks also offer accessible campsites, trails, and facilities for families and children. Visit the National Park Service Web site, the Greater Outdoor Recreation Pages, the National Accessibility Center, or NCPAD Web sites for additional information.

Transportation

Having to travel outside of a home area to find accessible facilities, programs, or camps is often a reality for families. In larger cities, travel time and assistance may take more time than parents are willing to spend. Short lessons or restricted swim times may not justify the effort. In rural areas, accessible options for exercise may not even exist or are so far away that driving isn't even realistic. Regular means of public transportation, such as taxis and buses to get children to school events and games, are often inaccessible because they are not lift-equipped. Paratransit options are rarely considered for community parks and recreation classes, trips, and camps.

Many communities offer some sort of transportation for persons with disabilities such as an accessible city bus system, paratransit buses, accessible taxis, or private service companies. School systems may be required to provide transportation to events, field trips, and other activities. Parents should discuss their needs with school district personnel. Independent living resource centers, developmental disability organizations, and other regional agencies sometimes have transportation options as well. Under the ADA, community parks and recreation classes and programs must make reasonable accommodations for

persons with disabilities. Some adapted sports programs offer transportation services.

Finances

Families of children with disabilities may already feel the financial crunch from medical bills, medical equipment costs, prescriptions, transportation expenses, and so forth. The budget for recreation and leisure, school sports, or summer camp is limited. Parents also say that frequently they pay for a family outing, such as a day at the water theme park, only to find that their children with disabilities cannot participate or get very little out of the facility. Specialized activities, such as adapted sports or classes, may be noninclusive family events.

A good number of adapted programs recognize that persons with disabilities and their families, siblings, and friends want to participate in recreation together. Communities are developing accessible recreation options, such as ski resorts, because the average person with a disability wants to bring family or friends for leisure and the community benefits in turn by food and lodging dollars. Sliding-scale fees, scholarships, grants, and corporate support also help make programs and activities more affordable. Many adapted sports programs are free or at little cost to consumers.

Assistance

Another obstacle to recreation is the need for assistance in order to participate. Unless a parent accompanies a child, there is no staff to assist with dressing, transferring, etc., in most pools and gyms. Parents find it frustrating when staff members are unaware of accessibility features such as roll-in swim chairs, flotation devices, or how to operate adaptive equipment, such as a pool lift. Parents and youth want the assistance of friendly, helpful staff and skilled instructors. In gyms, summer camps, and schools, parents would like to see peer mentors with disabilities or employees with disabilities to serve as role models for their children. Especially during adolescence, children need someone to look up to who is a positive influence as well as personal time to be with friends away from parents. It would be helpful to give children a chance to meet, compete, and socialize with peers with disabilities and other athletes with disabilities.

One option for assistance is that a personal care assistant (P.A.) can accompany the person with a disability and help as needed. P.A.s cannot be charged fees for accompanying an individual with a disability.

Many fitness professionals and adaptive recreation professionals are employed by fitness centers, pools, and communities to provide knowledgeable assistance. In some communities, volunteers are available at gyms, pools, and facilities to help with transfers, operating equipment, and assisting in other ways as needed. Sometimes, recreation therapy students or adaptive recreation students provide assistive services as part of their educational training. Staffers are also taking advantage of continuing education workshops being offered nationwide on a variety of disability issues.

Another option is to request an inclusion aide. An inclusion aide will assist the person with a disability so that he or she may fully participate in existing recreation or leisure programs. The Americans with Disabilities Act (ADA) states that all programs and services for people with disabilities must be provided in the most integrated setting possible.

When parents register their child for a class or program, they need to indicate on the registration form that their child has a disability that requires an accommodation. An assessment will be given and a decision will be made to determine if an inclusion aide is needed. The inclusion plan will contain the reasonable modification needed for participation.

Hopefully, more and more facilities like Crosstrainers Fitness Forum in Michigan, which is owned and operated by persons with disabilities, will emerge. Adapted programs and camps rely extensively on trained personnel and volunteers to provide safe, accessible, and rewarding recreational experiences. Through these opportunities, children can connect with others with similar disabilities as well.

Varied Activities

Children and parents would like to see a variety of activities for varying disabilities. Sometimes children with developmental disabilities, children with visual impairments, and children with physical disabilities are placed together in programs and events. A child who has cerebral palsy can have a hard time playing basketball as children with spinal cord injuries zip around in wheelchairs.

Although sometimes a program will combine children with varying disabilities to meet the quotas for keeping a program operating in some locals, many specialized programs and camps are developing. For instance, there are summer camps specific to children with diabetes, cancer, burns, autism, developmental disabilities, and spinal cord injuries. Numerous organizations have been developed for athletic participation by persons with disabilities, including Disabled Sports USA, Special Olympics, International Sports Organization for the Disabled, International Committee of Sports for the Deaf, and International Paralympic Committee. This list is a small sample of the organizations that are available.

Many adapted programs are inclusive of all ages and all disabilities and may even include non-disabled peers and siblings to grow beyond the segregated settings that have existed for so many years. Variety gives children a chance to try different sports, adds to the skills developed, and increases the likelihood of finding activities for lifetime participation.

Benefits

Physical fitness is an important benefit of sports participation. Physical recreation programs in the community may be a cost-effective means of preventing secondary health conditions, such as obesity and diabetes, resulting from low levels of fitness. Just like their non-disabled peers, children with disabilities

need an outlet for their physical energy. Physical activity increases a child's ability to cope with stress and anxiety. Self-esteem and building friendships follow closely as another benefit of participation. Socialization is important to mental health and well-being and can help a child be more self-sufficient and confident.

Another valuable lesson all children could learn is that it is okay not to win. Learning skills, setting goals, having fun, and being part of a team are important experiences. Children and youth with disabilities see another benefit as well; with resources and support to enable them to participate freely in fitness and recreation, they can begin to challenge some of the barriers and just have fun like everyone else.

Resources

Following is a partial list of available resources to get you started. You may refer to some of these Web sites for additional links to other Web sites and programs. Also, local libraries and the Internet have listings under areas such as "Adapted Recreation," to help find programs and resources in your region.

ORGANIZATIONS

[America's Athlete's with Disabilities](#)

America's Athlete's with Disabilities (ADD), founded in 1985, is made up of five disabled sports organizations. Its board of directors consists of representatives from each of these member organizations. Its goal is to raise and manage funds to support the Victory Games, which are athletic competitions held around the country for adults and youth with disabilities. The AAD also offers disability awareness education programs and the Disabled Youth Sports Training and Competition Program.

[Disabled Sports USA](#)

Disabled Sports USA is a non-profit organization started in 1967 by disabled veterans. This organization focuses on improving the quality of life for people with disabilities by providing affordable inclusive sports and recreation experiences that build self-esteem and confidence, and enhance active participation in community life. Disabled Sports USA provides sports such as snow skiing, water rafting, camping, and many others. It also provides adaptive equipment for these activities.

[Kids on the Block, Inc.](#)

The Kids on the Block provides educational puppet programs that enlighten children on the issues of disability awareness, medical-educational differences, and social concerns. At the national office, staff members research and develop relevant and timely program topics for delivery by more than 1,000

troupes around the world. Kids on the Block has a strong commitment to provide communities with programs that address children's questions, concerns, and needs in a lively and entertaining manner. Kids on the Block educational curricula helps to create positive attitudinal and behavioral change for present and future generations.

[National Center on Accessibility: Recreation, Parks and Tourism](#)

A collaborative program of Indiana University and the National Park Service, the National Center on Accessibility is the nation's premier resource promoting access for people with disabilities in recreation. Over the last decade, NCA has played a critical role in increasing awareness of inclusion of people with disabilities in parks, recreation, and tourism while advancing the spirit and intent of the Americans with Disabilities Act, Rehabilitation Act, and other disability legislation.

Through the comprehensive services of research, technical assistance, and education, NCA focuses on universal design and practical accessibility solutions creating inclusive recreation opportunities for people of all abilities. NCA links the preferences and needs of people with disabilities to those of practitioners designing facilities and planning programs. Since its inception in 1992, professionals such as park superintendents, facility managers, architects and landscape architects, program coordinators, civil engineers, planners, interpreters, and exhibit designers, accessibility coordinators, advocates, and consumers have drawn on NCA as a valued resource.

[National Center on Physical Activity and Disability](#)

Founded in 1999, the National Center on Physical Activity and Disability works to promote health benefits among people with disabilities through increased participation in all types of physical activity. These may include recreational programs, specific sports, exercise techniques, fitness activities, adaptive equipment, and more.

NCPAD is a comprehensive electronic information center that offers telephone and online access to a wide range of resources on physical activity and recreation for people with disabilities. NCPAD's online resources on physical activity and disability, available at anytime through the NCPAD Web site, include downloadable factsheets and monographs, video clips, discussion groups, a calendar of upcoming conferences, events, and meetings, summaries of important research findings, a monthly newsletter, and a searchable database of programs and services available throughout the U.S. Toll free telephone line: 800-900-8086.

[National Consortium on Physical Education and Recreation for Individuals with Disabilities](#)

This site is maintained by the National Consortium on Physical Education and Recreation for Individuals with Disabilities (NCPERID). It contains information on the Consortium's mission, annual meeting, membership information, and an on-line copy of its newsletter, "The Advocate." It also contains links to

many related sites.

[North American Riding for the Handicapped Association](#)

NARHA is a membership organization that fosters safe, professional, ethical, and therapeutic equine activities through education, communication, standards, and research for people with and without disabilities.

[Special Olympics](#)

This site is maintained by Special Olympics International, with information on sports offered by Special Olympics, links to individual state programs, volunteering, and other pertinent information.

[U.S. Adaptive Recreation Center](#)

The United States Adaptive Recreation Center (USARC) is an independent non-profit organization that began in 1983 and has grown into one of the largest adaptive recreation programs of its kind. It is headquartered at Big Bear Mountain Resort in Big Bear Lake, California. USARC provides winter outdoor recreation lessons such as adaptive skiing and snowboarding, and summer outdoor recreation lessons such as water-skiing, jet skiing, kayaking, sailing, and fishing. It also offers special events such as a ski-a-thon, and tennis and golf tournaments.

ONLINE RESOURCES

[Bandaides and Blackboards](#)

This is a site about children growing up with medical problems. Its goal is to help people understand what it's like, from the perspective of the children, to grow up and live with certain medical conditions. These stories are told by children as they have become experts at coping with problems that most of you have never heard of. They share with us how they do it, and they hope that you'll be glad you came to visit. You can visit three areas, one for younger children, one for teens, and one for adults. Many of their stories are uplifting and contain the authors' thoughts about how they fare in physical education classes. Other information at the site includes strategies of inclusion, and links for parents and teachers. This may be a good site for health classes. This site was developed by Joan Fleitas, a nurse at Fairfield University in Fairfield, Conn.

[Internet Resources for Special Children](#)

The Internet Resources for Special Children (IRSC) Web site is dedicated to communicating information relating to the needs of children with disabilities on a global basis. It includes a wealth of information on specific disabilities, laws, adapted equipment, and technologies, recreation and sports, and schooling.

[Maine Handicapped Skiing](#)

Maine Handicapped Skiing (MHS) is the largest, non-profit year-round adaptive recreational program in Maine. MHS provides skiing, snowboarding, snowmobiling, canoeing, kayaking, horseback riding, fishing, golf, wheelchair tennis and more. All lessons are provided free of charge to participants.

[Shake-A-Leg](#)

Shake-A-Leg, Inc. is a non-profit organization founded in 1982 to serve people with disabilities, with an emphasis placed on spinal cord and related nervous system conditions. Shake-A-Leg offers multi-faceted therapy programs that focus on improving the mind, body and spirit. The programs are: Body Awareness Therapy; Body Awareness Therapy for Teenagers; Adaptive Sailing; and Confidence Is Cool programs for children with disabilities.

Shake-A-Leg's world-renowned Adaptive Sailing Program has been used as a model program throughout the United States. From the fully-accessible facility at Fort Adams State Park in Newport, Rhode Island, 5 custom designed Freedom 20s are available to people with physical and developmental disabilities for recreational, instructional and competitive sailing.

[Texas Adaptive Aquatics](#)

TEXAS ADAPTIVE AQUATICS (TAA) is a non-profit adaptive water skiing program for persons with physical disabilities. Water skiing instruction programs are available at all levels from beginners to international competitors. All equipment is supplied by TAA.

[Skating Association for the Blind and Handicapped](#)

The Skating Association for the Blind and Handicapped (SABAH) provides weekly adaptive ice skating lessons and equipment to children, youth, and adults with all types of disabilities. For more than 22 years, SABAH has taught 9,000 Western New Yorkers who have physical, cognitive, or emotional challenges to ice skate. SABAH operates six sites in Erie and Niagara counties and serves skaters from six Western New York counties.

[SkiCentral](#)

SkiCentral, originally born as the Consummate Skiing List in October 1995, is a growing specialty search engine. It provides invaluable guidance to sites about skiing for disabled and non-disabled persons.

[Therapeutic Recreation](#)

This therapeutic recreation directory site links to many different topics ranging from activity and treatment ideas to workshops and conferences.

[Yoga for the Special Child](#)

This site contains information on teaching yoga to infants and children with Down syndrome, cerebral palsy, attention deficit disorder, learning disabilities, and other conditions.

ADAPTED PHYSICAL EDUCATION RESOURCES

[Adapted Physical Education Advocacy Page](#)

This site is an adapted physical education advocacy page maintained by Dr. Leonard Kalakian, Professor in the Department of Human Performance at Mankato State University in Minnesota. A definition of adapted physical education (APE) is proposed, with some questions and answers about inclusion, physical education, and the relationship of APE to other services such as OT and PT, laws, and physical education.

[Anchorage School District Adapted PE Page](#)

This site contains information about adapted physical education, including a list of common disabilities, teaching strategies, photos of equipment for adapted physical education settings, and a list of resources.

[New Jersey Adapted Physical Education Council](#)

The New Jersey Adapted Physical Education Council uses this site to promote the advocacy of Adapted Physical Education in the state of New Jersey.

[P.E. Central](#)

Information on adapted physical education videos, adapted guides, equipment, journals, research, and more.

[Project INSPIRE](#)

Project INSPIRE, on the Texas Woman's University Web page, provides a wealth of information regarding adapted physical education, including concise fact sheets regarding typical behaviors associated with a number of disabilities, program modification suggestions, and Internet links to facilitate the acquisition of additional information.

ADAPTIVE EQUIPMENT/ TOYS

[Achievable Concepts](#)

The entire range of adapted equipment and specialized products is listed with prices. The equipment ranges from the passive to the extreme and includes adapted cycles, beach wheelchair, modified games and cards, bowling aids, specialized gardening equipment, activity resource manuals, and other publications. The equipment is suitable for adults and children with disabilities, as well as for aged care facilities and special schools.

[Flaghouse](#)

A catalog of equipment, games, recreational supplies, and toys is available from this site. T: 914-699-1900.

[Funtastic Learning](#)

This site offers a catalog with toys and games for children with special needs, particularly learning disabilities and attention deficit disorder (ADD).

[Dragon Fly Toy Company](#)

Here is a catalog of adapted battery-operated toys, adapted art equipment, textured material toys, books, and adaptive playground equipment. T: 800-308-2208.

[Enabling Devices](#)

Enabling Devices, a division of Toys for Special Children, Inc., develops assistive and adaptive devices for physically challenged people of all ages to enable more effective communication, learning, work, play, and functioning. Devices include toys, communicators, sensory devices, etc. Additionally, it offers a custom design service. The Web site provides an online catalog, including pictures, descriptions, prices, and how to order.

[Freedom Concepts, Inc.](#)

www.freedomconcepts.com

Freedom Concepts manufactures specialty bikes for adults and children with special needs. The Web site provides a catalog of its products, including pictures, description, and how to order.

[Innovative Products, Inc.](#)

Innovative Products specializes in assistive mobility devices for children with disabilities. The Web site provides a catalog of their products, including pictures, descriptions, and how to order.

[National Lekotek Center](#)

The National Lekotek Center, in service for 20 years, provides family play centers and toy lending libraries for children with disabilities. Family play centers offer toys, books, and computer software and hardware, which are selected or adapted to fit the way their minds and bodies work. Call 1-800-366-PLAY or e-mail lekotek@lekotek.org to locate the nearest Lekotek Center.

CAMPS

[Kids Camps.com](#)

Kids Camps.Com, founded in 1995, offers a comprehensive directory of camps for children with disabilities. These camps are located throughout the United States and Canada.

[National Center on Physical Activity and Disability: Summer Camps 2003 for Children, Teens, and Adults with Disabilities](#)

Have you decided which camp you'll be attending this summer? If not, consult NCPAD for an excellent source of summer camp information, including camp directories, individual camp listings, as well as the "Discover Camp" handbook that can be obtained directly from NCPAD.

[Adaptive Adventures](#)

Adaptive Adventures takes pride in creating sports and recreation opportunities for youth by providing access to the outdoors and helping families work toward inclusion in their local communities. It maintains an extensive inventory of adaptive sports equipment to accommodate the growing number of youth participants in various programs. For a list of camps and activities around the United States, access the following link: <http://www.adaptiveadventures.org/youth.html>

ACCESSIBLE PLAYGROUNDS

[Boundless Playgrounds](#)

Boundless Playgrounds is a unique national, non-profit organization that has, in a short time, built a reputation for excellence in working with communities throughout the country to facilitate the development of universal playgrounds. The organization, headquartered in Bloomfield, Conn., was

founded in 1997 by an enthusiastic team of parents and professionals. Boundless Playgrounds creates magical places where all children, including non-disabled children and children who have physical, sensory, and developmental disabilities, can play and grow together.

Hadley's Park

The mission of Hadley's Park is to improve the lives of children by helping communities create exciting universally accessible playgrounds that allow children of all abilities to have fun and safe play environments so they can interact with each other and play to their highest potential. Other playgrounds listed on the Hadley's Park Web site include:

- Damascus, MD The Damascus Friend-ship
- Dulles, VA Hadley's Main Street USA Playground at Dulles Town Center
- Easton, MD Togetherness Island
- Germantown, MD Austins Inspiration
- North Bethesda, MD Noah's Ark
- Potomac, MD. Hadley's Playground at the Falls Road Local Park
- Rockville, MD Hadley and Friends Playground
- St. Louis, MO Ackerman Firehouse
- St. Louis, MO Southview Town
- Washington, D.C. The Speedway at The Arc

PARKS/OUTDOOR RECREATION

The National Park Service

www.nps.gov/parks.html

The National Park Service Web site provides information on all national parks, including accessibility information.

Greater Outdoor Recreation Pages

www.gorp.com

With its comprehensive National Parks coverage and extensive information on vacation destinations throughout North America, GORP.com offers practical advice to keep you exploring your backyard and beyond. GORP.com provides detailed planning guides, travel tips, and expert advice for all your favorite outdoor activities from camping to canoeing, biking to birding. This Web site offers information on parks, activities, destinations, special topics and more.

PUBLICATIONS

[PALAESTRA](#)

PALAESTRA: Forum of Sport, Physical Education & Recreation For Those With Disabilities, a quarterly publication, published in cooperation with both the U.S. Olympic Committee's Committee on Sports for the Disabled and the American Alliance for Health, Physical Education, Recreation & Dance's Adapted Physical Activity Council, is a valuable resource for consumers, their families, and professionals. PALAESTRA, a Greek word for a gymnasium or sports school, provides a forum for the exchange of ideas and information concerning adapted physical activity for individuals with disabilities. Whether your interest lies in sports or recreation; training or teaching; outdoor adventure or dance; or national or international championships, there is always something entertaining and informative available within PALAESTRA.

References

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About the Author

Joanne Bauman, a member of NCPAD's REC-TECH Advisory Committee, has a master's degree in clinical psychology and has counseled persons with a variety of disabilities, including traumatic brain injury. She is pursuing training in herbal medicine to incorporate with psychology into a holistic health practice. Her personal experience with juvenile rheumatoid arthritis led her to health and rehabilitation psychology.

selected research on the barriers and benefits of PA to point out the paradoxes, nuances, contrasting perspectives and complexities of the findings to inform future research. For example, children with Cerebral Palsy (CP) and Spina Bifida (SB) who participated in an after school adapted sport program remarked on the important lists of barriers to PA that people with disabilities encounter. [e.g. 5,7,37,38,44,45,48,53,58,62,63]. Some of these barriers categorized as a barrier to entering a fitness facility to engage in PA. However, the same manual wheelchair allows the user to. Children with disabilities want to have friends, enjoy activities, have a break from parents, and be included like everyone else. Like other children, their interests range from swimming and sports, to visiting parks and playgrounds, attending summer camps, and just hanging out with friends. Multiple barriers can stand in the way of fitness and leisure for children with disabilities. Many parents are apprehensive to encourage their children to become involved, because of the range of obstacles they were likely to encounter. Yet, many resources are making it possible for children with disabilities... Physical benefits of fitness programs for children with disabilities. -Increased gait speed -Increased strength -Decreased energy expenditure, improved resting and submax HR -Improved gross motor skills -Decreased falls -Improved self-image. Challenges to fitness programs. Barriers on incorporating wellness into practice. -Lack of resources/materials -Lack of interest of child/family -Economic limitations of child's family -Lack of community programs -PT's belief that wellness promotion is not in role of PT. Systematic Review: Benefits of Physical Activity for Youth with Developmental Disabilities. Evaluation of Community-Based Group Fitness program for children with disabilities.